

27-AA-0005

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
81 HIGUERA STREET, SUITE 200  
SAN LUIS OBISPO, CALIFORNIA 93401-5427**

**ORDER NO. 94-019  
WASTE DISCHARGE REQUIREMENTS  
FOR**

**MONTEREY COUNTY DEPARTMENT OF PUBLIC WORKS  
JOHNSON CANYON ROAD CLASS III LANDFILL  
MONTEREY COUNTY**

The California Regional Water Quality Control Board,  
Central Coast Region (hereafter Board), finds:

1. Monterey County (hereafter "Discharger") owns the Johnson Canyon Site Class III Landfill (hereafter "Landfill"). Rural Garbage and Dispos-All Service operates the Landfill through contracts with the County.
2. The Landfill is located in Monterey County approximately 2 miles northeast of the City of Gonzales as depicted on Attachment "A". The site address is 31400 Johnson Canyon Road, Gonzales, California. The site is located in Township 16 South, Range 5 East, Sections 15 and 22 and is legally defined by Monterey County Assessor as Parcel Number APN 223-042-18.
3. These waste discharge Requirements are being revised/updated to incorporate criteria currently applicable to solid waste disposal sites, particularly:
  - a. criteria established in California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15), including Article 5, pertaining to landfill water quality monitoring and response programs, as amended July 1, 1991;
  - b. criteria established in California Code of Regulations, Title 14 (Title 14), Division 7, Chapter 3, Article 7.8; Chapter 5, Article 3.4; and Chapter 5, Article 3.5, pertaining to Closure and Post-Closure Regulations; and
  - c. criteria established in 40 Code of Federal Regulations Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule (Known as "Subtitle D"), as promulgated October 9, 1991.
4. This Order revises/updates and replaces Order No. 86-69, "Waste Discharge Requirements for Monterey County Department of Public Works and Rural Garbage and Dispos-All Site, Monterey County", adopted by the Board on May 2, 1986. Order No. 86-69 regulated all waste discharges to the Landfill. Implementation of applicable revised Article 5 monitoring requirements and various other pertinent landfill changes, including compliance with other state (Title 14) and federal Subtitle D landfill regulations, will bring the Landfill into compliance with current landfill regulations.
5. Land use within 2 miles of the site is primarily for agricultural and cattle ranching. An airport building site is located approximately one mile south of the Landfill. Land use within 1000 feet of the site is used for treating winery wastewater.
6. The Landfill is located on the east side of the Salinas Valley near the Western flank of the Gabilan Range. The Landfill lies on a west-facing slope comprised of alluvial material. The site ranges in elevation from 320 to 440 feet above mean sea level. The Landfill is approximately two miles northeast of Gonzales and serves residents and businesses in the nearby unincorporated areas of the Monterey County, as well as, the cities of Greenfield, Gonzales and Soledad.

7. Four soil types have been mapped in the Landfill area. The four soils surrounding the Landfill are the Chular Loam or Series (2-9% slope), Danville Sandy Clay Loam or Series (0-2% slope), Gloria Sandy Loam or Series (2-9% slope), and Elder Sandy Loam or Series (0-2% slope). The Chular Series is found on alluvial fans and terraces. The Danville Sandy Clay Series is found on alluvial fans with granite and schistose source rocks. The Gloria Sandy Series is found on granite alluvium on fan-like benches and terraces. The Elder Sandy Series contains well drained soils on alluvial fans and valleys with granite and schistose source rock.
  8. Due to insufficient data with respect to the geologic materials between the base of the Landfill and ground water, the Discharger has initiated a thorough site specific hydrogeologic investigation. Based on data from the hydrogeologic study and subsequent implementation of a ground water monitoring program, the Discharger will ensure whether degradation of beneficial uses of ground water beneath or adjacent to the Landfill is occurring or will occur. Based on current data, the Discharger cannot demonstrate natural geologic materials between the base of the Landfill and ground water can ensure degradation of beneficial uses of ground water beneath or adjacent to the Landfill will not occur.
  9. The site is located approximately 10.8 miles west of the San Andreas Fault zone. Because of its proximity to the Fault, the site is considered to be in an area of potentially high seismic activity. Earthquakes emanating from the San Andreas Fault having a magnitude of 7.5 to 8.5 and a peak horizontal acceleration of 0.46g are possible. In the period 1906 to 1961, eleven major epicenters were recorded within a ten mile radius of the site. Richter Scale magnitudes ranged between 4.0 and 4.4 for seven events, and between 4.5 and 5.9 for four others.
- The King City Segment (Rinconada Fault) located 7.1 miles from the site could also generate an earthquake of significant magnitude. Landfill design should consider impacts from this fault, as well. The Reliz fault, another major northeast-trending, right-lateral fault, is located approximately 5 miles southwest of the site. An unnamed, northwest fault, is located approximately 2 miles north of the site.
10. A thorough site assessment was initiated in January 1994 to accurately characterize hydrogeologic conditions directly beneath and adjacent to the Landfill. The hydrogeologic investigation will determine, at a minimum, ground water depths, flow patterns, gradients and rates. Available information suggests that ground water may occur in one or more locally perched ground water zones controlled by confining to semi-confining layers within the alluvial fan sequence. Only two wells included in the current ground water monitoring program, Zanetta and JC-M3, have regularly yielded water. The Zanetta well is a supply well screened over multiple aquifers. JC-M3 is reportedly contaminated with cement grout.
  11. The Landfill site is located between two northeast-southeast trending streams. Johnson Creek is an intermittent stream which runs parallel to the northwest boundary about 200 feet from Johnson Canyon Road. McCoy Creek is an intermittent stream located approximately 2 miles southeast of the site. There are several minor intermittent streams and ponds within 1 mile of the site.
  12. The site is approximately 30 miles inland from the Pacific Ocean. The site receives approximately 12.3 inches of rainfall per year, primarily between November and May.
  13. The currently permitted Landfill parcel is not located within any designated wetlands.

14. Surface runoff from the site is directed into a series of ditches along the Landfill perimeter. Surface runoff consists primarily of draining rainwater. The ditches combine and exit the site on the southern corner of the Landfill property. There are four temporary sedimentation basins located within the Landfill parcel. Two are usually filled with water.
15. The Landfill surface water quality has not been determined.
16. The Discharger is required to, and has initiated (concurrent with a hydrogeologic investigation) developing and subsequently implementing a general water quality detection monitoring program. This includes a sufficient number of background and downgradient monitoring points installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer which represents the quality of ground water passing the point of compliance and which would allow for the best assurance of the earliest possible detection of a release from the Landfill. As soon as an approved detection monitoring program is implemented and sufficient monitoring data is available, a Water Quality Protection Standard for this Landfill will be established.
17. There are 22 wells located within a mile of the site. These wells are mainly used for production and monitoring.
18. The regional underlying ground water has displayed rapidly increasing concentrations of nitrate-nitrogen ions, as well as continued rise in total dissolved solids, chloride, and sodium ion concentrations. This pattern of increasing nitrate-nitrogen and salinity concentrations is apparent throughout the Salinas Valley and is subject of a study by the Monterey County Flood Control and Water Conservation District (1988). The County study concluded that the increased nitrate-nitrogen and salinity concentrations are the result of extensive agricultural land use, specifically feed lots and intensively cropped and irrigated areas.
19. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Board on November 17, 1989 and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the Water Quality objectives stated in that plan.
20. Present and anticipated beneficial uses of ground water in the vicinity of the discharge include:
  - a. domestic; and
  - b. agricultural.
21. The Landfill is included in the Monterey County Solid Waste Management Plan prepared by the County Environmental Health Division, and the Monterey County General Plan. The Landfill operates under Waste Board's Solid Waste Facilities Permit (SWFP) No. 27-AA-0005.
22. Use Permit No. PC-2076 was issued by the Monterey County Planning Commission and Building Inspection Department.
23. An Environmental Impact Report for the Landfill, EIR No. 75-115, State No. 76010561, Notice of Determination, was issued April 15, 1976.
24. The 'Master Plan, Johnson Canyon Waste Disposal Site, Monterey County, California, (Master Plan)' states that rectangular cells are to be excavated from the Landfill surface and that liners and leachate collection systems installed in the cells before receiving refuse. Originally, the cells were to be approximately 200 feet wide and 1,000 feet to 1,800 feet long and oriented with their long sides parallel to the northeastern boundary of the Landfill.

25. The Master Plan designates a cell which has been filled to capacity and received final cover as a 'Module.' Full development includes Modules I through XII, and Cells A through K.
26. The area proposed to be occupied by Module I was filled before Cell A was completed. Therefore, the 'footprint' of Cell A was moved 100 feet to the southwest, providing an additional area approximately 100 feet wide by 1,000 feet long. This became part of Module I. As a result, all subsequent Cells and Modules are located 100 feet southwest of their locations proposed in the Master Plan. Attachment "B" shows the Johnson Canyon Road Landfill facility and the approximate revised locations of the existing fill area and planned future expansion modules.
27. A roughly semicircular portion of the original Cell A (with an approximate 200 feet radius) near the existing gatehouse and maintenance building, has been dedicated to truck storage. This area has not received fill or been excavated in the course of Landfill activities. The courses of nearby drainage ditches have been modified as required to accommodate this area.
28. The Master Plan specifies that completed modules are to have surface slopes between 4 and 20 percent. The present slope of Module I's top surface, which has been filled to capacity, is approximately 2 percent or less.
29. Stability analyses were performed on the most adverse temporary cut slope to be graded at a slope inclination of 3:1 (horizontal:vertical) with a height of 20 feet and on the final refuse fill slope to be constructed at a slope inclination of 5:1 with a height of 40 feet. The stability of the slope was then evaluated under seismic loading conditions produced by the ground acceleration from a Maximum Probable Earthquake (MPE). A review of the tectonic features within the site's vicinity indicated that the design-controlling earthquakes would most likely be generated by the San Andreas Fault located at a distance of 17.4 kilometers from the site or the King City segment of the Rinconada Fault located at a distance of 11.4 kilometers from the site. The analyses indicate that the average peak horizontal ground accelerations expected at the site from an Maximum Probable Earthquake occurring on either the San Andreas Fault (0.46g) or the King City Segment of the Rinconada Fault (0.48g) do not significantly exceed the yield acceleration of the 3:1 temporary cut slope (0.45g) or the 5:1 final refuse fill slope (0.51g). Therefore, both the temporary cut slopes and the final refuse fill slopes, including any containment structures, will remain stable and should not experience permanent deformation when subjected to MPE loading conditions.
30. The Landfill is generally constructed by the cut-and-cover method. Initially small trenches were excavated for refuse disposal. After the first series of trenches were excavated, the small trenches have been replaced with a single large trench excavation, or fill Module.
31. The total Landfill facility contains 122.5 acres, of which approximately 87 acres are currently permitted for nonhazardous solid waste disposal. Refuse placement over existing refuse fill areas is permitted to a maximum elevation of 438 feet above mean sea level (Module I), with a 4% downward slope towards Module XII. Module I is unlined. Module II and part of Module III are lined in compliance with Chapter 15 minimum liner system requirements. All future Landfill areas which have not received waste, beyond the "Existing Footprint" as of April 9, 1994, will be equipped with an approved Subtitle D composite liner system. The Chapter 15 lined portion of Module III is currently active. Refuse is also being placed over Module II areas which have experienced settlement.
32. The Discharger submitted an October 8, 1993 report titled "Johnson Canyon Landfill, October 9, 1993, Subtitle D Report". The report included: 1) a 100-year Floodplain Map demonstrating the Landfill is not within a 100-year Floodplain; 2) aerial Landfill photographs documenting the 'Existing Footprint' of the Landfill as of October 9, 1993; 3) a demonstration that the Landfill is located within one mile or less of a drinking water intake; and 4) documentation of a Closure and Post-Closure Plan in compliance with Subtitle D requirements.

33. The Landfill receives approximately 72 tons per day of non-hazardous solid waste. Present projections indicate the Landfill will be operational until the year 2016. Years of operation and remaining capacity are based on current permitted Landfill boundaries as depicted on Attachment "B".

34. The physical properties of waste accepted at the Landfill are:

30 % municipal solid waste.

14 % waste from Soledad Prison.

12 % construction debris.

44 % miscellaneous solid waste including; tires, broken glass, bottles, plastic, corks, wood, triple rinsed pesticide containers, and yard waste such as tree trimmings, grass, and agriculture packing shed waste.

Pesticide containers disposed of at the site are accompanied by a letter signed by a company officer stating the containers have been triple-rinsed and stating that they were tested for compliance. Also, random sampling is performed by a gate attendant.

35. The Landfill meets the criteria of the California Code of Regulations as stated in Chapter 15 for classification as a Class III Landfill suitable to receive non-hazardous solid wastes. This Order implements the prescriptive standards and performance goals of Chapter 15, as adopted by the State Water Resources Control Board on October 18, 1984, and as amended on July 1, 1991.

36. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under California Code of Regulations, Title 22. Since such wastes do not pose a threat to water quality, Section 25143.7 of the Health and Safety Code permits its disposal in any landfill, providing waste discharge requirements specifically permit the discharge and the wastes are handled and disposed in accordance with other applicable local, state, and federal statutes and regulations.

37. Due to revisions of Article 5, Chapter 15, the Discharger submitted an August 1992 Amended Report of Waste Discharge (Report). The Report consists of proposed amendments to the Landfill's existing waste discharge requirements, including the monitoring and reporting program. It includes proposals for 1) ground water, surface water, and vadose zone water quality monitoring programs to comply with general requirements and performance standards contained in Article 5; and 2) the establishment of a financial assurance instrument to cover all expenses related to future corrective action costs. However, revisions to the Amended Report still need to be made. Additional requirements with respect to site assessment (hydrogeologic investigation), and development and implementation of a water quality monitoring and reporting program have been requested.

38. On October 9, 1991, the Environmental Protection Agency (EPA) promulgated regulations pertaining to solid waste disposal facilities known as 40 Code of Federal Regulations, Parts 257 and 258 Solid Waste Disposal Facility Criteria, Final Rule (also known as Subtitle D). California has received US EPA authorization (became an "Approved" State) to implement the Federal Subtitle D regulations. The majority of the Subtitle D regulations for most municipal solid waste landfills became effective and self-implementing on October 9, 1993. The Subtitle D regulations establish minimum national criteria for location, design, operation, clean-up, and closure for municipal solid waste landfills. Subtitle D implementation/applicability for most landfills is as follows:

- a. municipal solid waste landfills with Waste Discharge Requirements that stopped receiving waste on or before October 9, 1991 are exempt from Subtitle D except for monitoring requirements and deed restrictions.
- b. municipal solid waste landfills that receive waste on or after October 9, 1991, but stop prior to October 9, 1993, must meet only the final cover requirements specified in Section 258.60(a).

- c. municipal solid waste landfills that receive waste on or after October 9, 1993 must comply with all requirements of Subtitle D.

However, USEPA recently changed the effective date of the Federal municipal solid waste landfill criteria for existing, smaller landfill units from October 9, 1993 to April 9, 1994. The extension applies to municipal solid waste landfills that (1) accept less than 100 tons per day; (2) are in a state that has submitted an application to USEPA for approval of its permit program by October 9, 1993; and (3) are not on the Superfund National Priorities List. Most of the Subtitle D requirements became effective On October 9, 1993.

- 39. This municipal solid waste Landfill accepts less than 100 tons per day; is not on the Superfund National Priorities List; and is located in an approved state. Thus, the majority of the Subtitle D requirements for this Landfill will become effective and self-implementing on April 9, 1994 (except ground water monitoring requirements; and Subpart G, financial assurance requirements, which become effective October 9, 1994 and April 9, 1995, respectively).
- 40. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent a nuisance. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
- 41. These Waste Discharge Requirements contain prohibitions, discharge specifications, water quality protection standard(s), and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. These Waste Discharge Requirements are for an existing facility and as such are exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15301.

- 42. On November 23, 1993, the Regional Board notified the Discharger and interested agencies and persons of its intent to update/revise the waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.

- 43. After considering all comments pertaining to this discharge during a public hearing on February 11, 1994, this Order was found consistent with the above Findings.

**IT IS HEREBY ORDERED**, pursuant to authority in Section 13263 of the California Water Code, that the County of Monterey, its agents, successors, and assigns, may discharge wastes at the Johnson Canyon Road Class III Landfill (Landfill), providing compliance is maintained with the following:

(NOTE: Throughout these requirements, footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

- a = California Code of Regulations, Title 23, Chapter 15
- b = California Code of Regulations, Title 14
- c = Basin Plan
- d = Code of Federal Regulations, Part 257 and 258 (Subtitle D)
- e = California Water Code

Requirements without footnotes are based on professional judgement.)

#### A. DISCHARGE PROHIBITIONS

##### General Prohibitions

- 1. Discharge of waste to areas outside the "currently permitted Landfill area" (unfilled portion of Module III through Module XII), as depicted on Attachment "B", is prohibited.
- 2. Discharge of non-hazardous solid wastes within the currently permitted unfilled areas, where refuse placement has not occurred (second half of

Module III through Module XII), is prohibited; unless a composite liner system, as described in **Specification B.36**, is provided.<sup>d</sup>

3. Discharge of 'hazardous waste', as defined in Chapter 15, except for waste that is hazardous due only to its asbestos content, is prohibited.<sup>a</sup>
4. Discharge of 'designated' waste is prohibited except when the discharger demonstrates to the Executive Officer's satisfaction that waste constituents present a lower risk of water quality degradation than indicated by this classification. For purposes of this Order, the term 'designated' waste is as defined in Chapter 15.<sup>a</sup>
5. Discharge of "liquid wastes" or "semi-solid wastes" (i.e., wastes containing less than 50 percent solids by weight), other than leachate and gas condensate as described in **Discharge Specification B.7** and dewatered domestic sludge, is prohibited. Exemptions to discharging wastes containing less than 50% solids by weight may be granted by the Executive Officer if the Discharger can demonstrate the discharge will not exceed the moisture-holding capacity of the Landfill, either initially or as a result of waste management operations, compaction, and/or settlement.<sup>a</sup>
6. Discharge of dewatered sewage or water treatment sludge, which contains less than 50% solids by weight to any Landfill areas, shall meet conditions identified in **Discharge Specifications B.17**.<sup>a</sup>
7. Discharge of waste to ponded water from any source is prohibited.<sup>a</sup>
8. Ponding of liquids over solid wastes is prohibited.<sup>a</sup>
9. Discharge of leachate or gas condensate containing hazardous concentrations of constituents is prohibited.<sup>a</sup>
10. Discharge of wastes which have the potential to reduce or impair the integrity of containment structures is prohibited.<sup>a</sup>
11. Discharge of wastes which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products which in turn:
  - a. require a higher level of containment than provided by the Landfill,
  - b. are restricted hazardous wastes, or
  - c. impair the integrity of containment structures,is prohibited.<sup>a</sup>
12. Discharge of wastes within five (5) feet of the highest anticipated water table elevation, including the capillary fringe, is prohibited. If excavations encounter ground water or come within five (5) feet of ground water, native soil shall be replaced and compacted to satisfy this specification.<sup>a</sup>
13. Discharge of waste within 50 feet of the property line, 100 feet of surface waters, or 150 feet of any unsealed or domestic water supply, is prohibited.
14. Discharge of solid or liquid waste or leachate to surface waters, drainageway(s), or ground water, is prohibited.
15. Discharge of waste containing free liquid or moisture in excess of the waste's moisture holding capacity is prohibited. Waste must pass the paint filter test to determine if free liquids are present.<sup>a,d</sup>
16. Discharge of waste solvents, dry cleaning fluids, paint sludges, pesticides, phenols, brines, and acid and alkaline solutions is prohibited.<sup>a</sup>
17. Discharge of oils or other liquid petroleum products is prohibited.
18. Discharge of chemical and biological warfare agents is prohibited.<sup>a</sup>
19. The discharge of leachate or landfill gas condensate to any landfill waste management unit is prohibited, unless:

- a. the landfill gas condensate or leachate is being returned to the landfill waste management unit that produced it; and
- b. the portion of the landfill to which the leachate or condensate are discharged is equipped with a containment system as outlined in Specification B.36, of this order<sup>d</sup>.

20. Non-hazardous leachate or gas condensate spraying may be allowed for dust control purposes only upon written Executive Officer approval.

## B. DISCHARGE SPECIFICATIONS

### General Specifications

1. The Discharger shall develop and implement an Executive Officer approved monitoring and reporting program in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Landfill.<sup>a</sup>
2. Discharge of waste shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to an Executive Officer approved monitoring and reporting program.
3. Discharge of waste shall not cause the release of pollutants, or waste constituents in a manner which could cause a condition of pollution, or nuisance to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method as approved by the Executive Officer.<sup>a,c</sup>
4. Discharge of waste shall neither cause nor contribute to the pollution of ground water via the release of waste constituents in either liquid or gaseous phase.
5. Discharge of waste shall neither cause nor contribute to any surface water pollution or nuisance, including, but not limited to:
  - a. floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. increases in bottom deposits or aquatic growth;
  - c. an adverse change in temperature, turbidity, or apparent color beyond natural background levels;
  - d. the creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin; and
  - e. the introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.
6. The discharge shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the Landfill if such waste constituents could migrate to waters of the State in either liquid or gaseous phase and cause a condition of pollution or nuisance.
7. With written approval of the Executive Officer, water (including non-hazardous and non-designated leachate and gas condensate) used during disposal site operations shall be limited to the minimum amount necessary for dust control, construction (soil compaction), and vegetation establishment/irrigation purposes. The Discharger shall minimize the infiltration of rain-water, and prevent infiltration of leachate, or gas condensate into areas containing refuse, except as allowed by Prohibition A.19.
8. Disposal site operations shall not be a source of odor nuisance.

9. The Discharger shall prevent habitat formation for carriers of pathogenic microorganisms.<sup>a</sup>
10. The handling and disposal of friable asbestos containing wastes shall be in accordance with all applicable federal, state, and local statutes and regulations.
11. Ash wastes may be discharged in the Landfill only when chemical analyses demonstrate to the Executive Officer's satisfaction that the waste is non-hazardous.<sup>a</sup>
12. Wastes discharged in violation of these requirements and after the adoption date of this Order, shall be removed and relocated.
13. All refuse material that is wind-blown outside the currently permitted unfilled Landfill areas shall be collected and disposed in the Landfill properly. If wind-blown litter becomes a continuing problem, containment barriers (e.g., screens and/or fences) shall be constructed to prevent spreading of refuse.
14. The Discharger shall obtain and maintain a Board approved Financial Assurance Instrument (Instrument) to demonstrate financial responsibility for initiating and completing corrective action of all known or reasonably foreseeable releases from the Landfill until the end of the Post-Closure Maintenance Period, pursuant to Chapter 15 and Subtitle D regulations. The Instrument shall be legally valid, binding, and enforceable under State and Federal law.<sup>a</sup>
15. A program for periodic intake load-checking shall be maintained to ensure that 'hazardous waste', 'designated waste' and 'radioactive waste' are not discharged at this Landfill.<sup>a</sup>
16. The Discharger shall operate the Landfill in conformance with the most recently Executive Officer approved Master Plan, Operations Plan, and/or Site Development Plan, except where the plan(s) conflict with this Order. In the event of conflict, this Order shall govern in cases where it is most restrictive. Any changes to the plan(s) that may affect compliance with this Order must be approved in writing by the Executive Officer.<sup>a,c</sup>
17. Discharge of dewatered sewage or water treatment sludge to the Landfill shall meet all of the following criteria:
  - a. dewatered domestic sludge which is utilized beneficially as soil amendment to promote vegetation over intermediate or final cover may be allowed with written Executive Officer approval.
  - b. sludge discharged into the Landfill shall be only to Modules equipped with a dendritic/blanket-type leachate collection and removal system (LCRS) or acceptable equivalent immediately above the liner. However, if the sludge contains greater than 50% solids by weight, an LCRS may not be required depending on site specific conditions and upon Executive Officer approval.
  - c. a daily minimum solid waste-to-sludge ratio of 5 to 1 by weight shall be maintained to ensure co-disposal will not exceed the moisture-holding capacity of the nonhazardous solid waste. The actual ratio required by the Regional Board shall be based on site-specific conditions.
  - d. primary and mixtures of primary and secondary sewage sludge shall contain at least 20 percent solids by weight.
  - e. secondary sewage sludge, and water treatment sludge shall contain at least 15 percent solids by weight.
18. Waste shall not be discharged to a wetland, as defined in 40 Code of Federal Regulations, Section 232.2(r), or to any portion thereof, unless the Discharger successfully completes all demonstrations pursuant to 40 Code of Federal Regulations, Section 258.12(a). Such demonstration is subject to Executive Officer approval.<sup>d</sup>

19. Refuse shall be covered daily by at least six inches of cover material or, if allowed by the Local Enforcement Agency, meet Performance Standards of the California Code of Regulations, Title 14, Section 17683. Cover material shall promote lateral runoff of rainfall away from all active disposal area. Upon Executive Officer approval, alternative daily cover materials may be utilized. Long-term alternatives to the daily cover requirements must satisfy the alternative daily cover procedures and be approved by the Waste Board.<sup>a,b</sup>

**Wet Weather**

20. By October 1, of each year, all necessary runoff diversion and erosion prevention measures shall be implemented. All necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the Landfill and to prevent erosion or flooding of the Landfill and to prevent surface drainage, from contacting or percolating through wastes.<sup>a</sup>
21. All landfill surfaces and working faces shall be graded and operated to minimize rainfall infiltration into wastes, to prevent ponding of water, and to resist erosion. Positive drainage to divert rainfall runoff from areas containing waste shall be provided.
22. Drainage ditches crossing over landfill areas shall be lined with material which provides an effective permeability of  $10^{-6}$  cm/sec or less. If material other than clay or synthetic is used, data must be provided to, and approved by, the Executive Officer. The drainage facilities shall be designed and constructed to accommodate anticipated and peak surface runoff flows from a 100-year, 24-hour event.
23. Water collected in any storm water catchment basin or site water treatment facility may be used in minimum amounts necessary for dust-control, compaction, or irrigation of cover vegetation provided none of the water infiltrates past the root zones of vegetation or past a depth where effective evaporation can occur.
24. Waste containment barriers shall be maintained to ensure their effectiveness.<sup>a,b</sup>
25. The Discharger shall monitor potential releases from the site related to surface water runoff by complying with all NPDES Stormwater Monitoring Program requirements.
26. Storage facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm, or otherwise managed, to maintain the design capacity of the system.<sup>a</sup>
27. A minimum of two feet freeboard shall be maintained in all leachate containment ponds. Leachate ponds shall be designed to avoid overtopping as a result of seiches.<sup>a</sup>
28. If adequate soil cover material is not accessible during inclement weather, such material shall be stockpiled during favorable weather to ensure year-round compliance.<sup>a</sup>
29. Throughout the rainy season of each year, a minimum one (1) foot thick compacted soil cover designed and constructed to minimize percolation of precipitation through wastes, shall be maintained over the entire active waste management unit.<sup>b</sup> The soil cover shall be in-place by October 1 of each year. The only exception to this specification is the working face. The working face shall be confined to the smallest area practicable based on the anticipated quantity of waste discharged and required waste management facility operations. Landfill areas which have been provided an Executive Officer approved vegetative layer as of the adoption date of this Order, shall not be required to satisfy the one foot minimum cover requirement. Based on site specific conditions, the Executive Officer may require a thicker soil cover for any portion of the active Waste Management Unit prior to future rainy seasons.
30. By October 1, of each year, vegetation shall be planted and maintained over all Landfill slopes, that will not be filled against during the rainy season, within the entire Landfill area to prevent erosion. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative layer thickness. Upon written Executive Officer approval, non-hazardous sludge

may be conditionally utilized as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs), unless approved by the Executive Officer.

31. A complete liquid mass balance shall be performed for all Modules and drainage facilities based on Chapter 15 prescriptive design parameters, and shall be submitted to the Board by October 30, 1994.

**Design**

32. Waste management units, containment structures, and precipitation and drainage facilities shall be designed, constructed, and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping and other damage due to natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).<sup>a</sup>
33. All waste management units, containment structures and precipitation and drainage facilities shall be designed and constructed under the direct supervision of a California registered civil engineer or a certified engineering geologist and shall be certified by that individual as meeting the prescriptive standards and performance goals of all applicable state and federal landfill regulations including, but not limited to Chapter 15, Title 14, and Subtitle D, prior to waste discharge.<sup>a,d</sup>
34. All Landfill facilities shall be designed and constructed to minimize damage during the "maximum probable earthquake" to the graded foundation and to structures which control leachate, surface drainage, erosion, and gas. The operator must demonstrate that all containment structures, including liners, leachate collection and removal systems, and surface water control systems are designed to resist the maximum horizontal acceleration in lithified earth materials for the site. The owner or operator must place the demonstration in the operating record and notify the Regional Board and Waste Board that it has been placed in the operating record.

35. The Discharger shall ensure the integrity of the final landfill slopes under both static and dynamic conditions, considering seismic acceleration from at least the maximum probable earthquake. The slope of those portions of the fill which will be the final exterior surface shall be developed in accordance with 17779 of Title 14, California Code of Regulations, Division 7, Chapter 3, Article 7.8. and Title 23, Division 3, Chapter 15, Section 2581, namely:

- a. all slopes shall have a minimum of one 15-foot wide bench for every 50 feet of vertical height.
- b. slopes shall not be steeper than a horizontal to vertical ratio of 1.75:1 (57%).
- c. slopes steeper than a horizontal to vertical ratio of 3:1 (33%) shall be supported by a slope stability analysis report approved by the Executive Officer.
- d. slopes with grades less than 3% require the approval of the Executive Officer.<sup>b</sup>

36. Wastes shall not be discharged to any areas outside the 'Existing Footprint' area which have not received waste as of April 9, 1994, unless the discharge is to an area equipped with a containment system, which meets either a. or b., below:

- a. A composite liner and a leachate collection and removal system. The liner must consist of two components:
  - 1) **Lower Component:** A minimum two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec (0.1 feet/year); and
  - 2) **Upper Component:** A minimum 40-mil flexible membrane liner or a minimum 60-mil high density polyethylene. The FML component must be installed in direct and uniform contact with the compacted soil component; or

- b. An engineered alternative design to a., above. Engineered alternative designs must satisfy the performance criteria in 40 Code of Federal Regulations, Section 258.40(a)(1) and (c), and satisfy the criteria for an engineered alternative to the above Prescriptive Design, as provided by Title 23, California Code of Regulations, Section 2510 (b), where the performance of the alternative composite liners' components, in combination, equal or exceed the waste containment capability of the Prescriptive Design.<sup>d</sup>
37. Permeability determinations shall be as specified in Article 4 of Chapter 15. Permeabilities specified for containment structures other than cover shall be relative to the fluids, including waste and leachate, to be contained. Permeabilities specified for cover shall be relative to water. Liner and cover permeabilities shall be determined primarily by appropriate field test methods in accordance with civil engineering practice (sealed double ring infiltrometer test is required). The results of laboratory tests with both water and leachate, and field tests with water, shall be compared to evaluate how the field permeabilities will be affected by leachate. Appropriate compaction tests may be used in conjunction with laboratory permeability tests to determine field permeabilities as long as a reasonable number of field permeability tests are also conducted.<sup>a</sup>
38. Leachate collecting and removal systems shall be installed immediately above the liner and shall be designed, constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the Module.<sup>a</sup>
39. The leachate collection and removal system shall:
- a. be designed and constructed to the satisfaction of the Executive Officer, to prevent the development of hydraulic head on the liner; and
  - b. convey to a sump, or other appropriate collection area, all leachate reaching the liner. The leachate collection and removal system shall not rely upon unlined or clay-lined areas for leachate conveyance. The depth of fluid in any collection sump shall be kept at the minimum needed to ensure efficient pump operation.<sup>a</sup>
- Closure**
40. Final Landfill configuration shall conform to the contours delineated in the most recent version of the Master Plan, Operations Plan, and/or Site Development Plan.
41. Areas at final elevations, varying from 320 to 440 feet above mean sea level, shall be covered with final cover pursuant to Section 2581 of Chapter 15 and Subtitle D final cover requirements, including from bottom to top:<sup>a</sup>
- a. at least a two foot foundation layer placed over waste;
  - b. (1) for landfills which have not been equipped with a Subtitle D composite liner system, a low permeability geomembrane or compacted clay with an in-place permeability  $1 \times 10^{-6}$  cm/sec, or no faster than the permeability of underlying natural geologic materials, which ever is less, or
  - (2) for landfills which have been equipped with a Subtitle D composite liner system, a low permeability geomembrane or compacted clay with an in-place permeability of  $1 \times 10^{-7}$  cm/sec, or no faster than the permeability of the underlying Subtitle D composite liner system; and
  - c. at least one foot of soil capable of supporting vegetation, resisting erosion, and protecting the underlying low permeability layer.

Hydraulic conductivity of low-permeability soil layer shall be determined by both laboratory and in-place field testing. Permeability determinations for cover materials shall be as specified in Article 4 of Chapter 15 and shall be appended to the final closure and post-closure maintenance plan. Construction methods and quality assurance procedures shall be submitted to the Executive Officer, and shall insure all parts of the low-permeability layer meet the hydraulic conductivity and compaction requirements. The final cover shall be graded to a slope of at least 3%, but not more than 10% unless adequate erosion control measures are implemented and approved by the Executive Officer.

42. All Landfill areas which have not reached final elevation, but will remain inactive over one-year, must be provided with an Executive Officer approved long-term intermediate cover. The thickness and permeability of the long-term intermediate cover shall be based primarily on site specific conditions including, but not limited to; length of exposure time, volume of underlying material, permeability, thickness and composition of existing cover, amount of yearly rainfall, depth to ground water, beneficial uses of underlying ground water, site specific geologic and hydrogeologic conditions, and effectiveness of any existing ground water monitoring system.
43. The Discharger shall implement final closure activities as the site operation progresses (e.g., within 30 days after a particular Module or portion of a Module reaches final fill elevation, final closure activities, consistent with the closure schedule, must be initiated), in accordance with requirements consistent with the closure of the entire site, as required or approved by the Executive Officer and the Waste Board in accordance with the most recently approved closure plan.<sup>a,b</sup>
44. All closed landfill WMUs shall be provided with at least two permanent monuments, installed by a licensed land surveyor, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure

maintenance period. Cumulative waste subsidence and settlement of areas where final cover is installed, shall be documented in the annual report.<sup>a</sup>

45. Partial closure shall be accomplished by implementing one or a combination of individual closure activities, but not limited to: placement of final cover, final grading, revegetation, and installation of environmental monitoring control systems consistent with the closure of the entire site. Units closed in accordance with the Executive Officer and the Waste Board, are not subject to future regulatory changes, unless monitoring data indicate impairment of beneficial uses of ground water.<sup>a,b</sup>
46. Engineered Alternative intermediate and final cover designs may be considered for Executive Officer and Waste Board approval, if such designs provide equivalent reduction in infiltration and protection from wind and water erosion.<sup>a,b</sup>
47. Methane and other Landfill gases shall be adequately vented, removed from the Landfill, or otherwise controlled, as required, to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone. Discharger shall comply with gas control requirements pursuant to Title 14 regulations.<sup>a,b</sup>

#### Reporting

48. Discharger shall notify Board staff, within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance which threatens the Landfill's containment integrity shall be promptly corrected. Correction schedules are subject to approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance and its cause; the period of

noncompliance including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. This provision includes, but is not limited to:

- a. violation of a discharge prohibition;
  - b. violation of any treatment system's discharge limitation;
  - c. slope failure; and
  - d. leachate seep occurring on, or in proximity to, the Landfill.<sup>a</sup>
49. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule, shall be submitted within 14 days following each scheduled date unless otherwise specified within the Order. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of achieving full compliance.
50. Reports shall be submitted in advance of any planned changes in the permitted facility or in an activity which could potentially or actually result in noncompliance.
- Site Specific**
51. Nonhazardous solid wastes shall only be discharged into, and shall be confined to:
- a. new waste management units, which includes the remaining portion of Module III and Modules IV through XII, specifically designed and constructed for nonhazardous waste containment, as required by current state (Chapter 15) and federal (Subtitle D) regulations; and
  - b. existing waste management units containing waste that have not reached final permitted elevation (varies with each Module). The vertical height (refuse placement over existing refuse) of any waste management units shall not exceed the permitted final elevation, including anticipated settlement, unless as allowed by the Executive Officer pursuant to **Provision D.23**, of this order.
52. Prior to discharge, all incoming wastes containing greater than 50% liquid by weight must be combined with soil or other approved material outside of the active fill area, until the wastes are less than 50% liquid by weight.
53. The Discharger shall thoroughly characterize geologic and hydrogeologic conditions directly beneath the Landfill to determine, at a minimum:
- a. the direction(s) of ground water flow including both horizontal and vertical components of flow;
  - b. the seasonal/temporal, naturally and artificially induced (i.e., off-site production well pumping, agricultural use) variations in ground water flow;
  - c. the hydraulic conductivities of the significant hydrogeologic units underlying the Landfill; and
  - d. the velocity of ground water flow.
54. Based on the results from **Discharge Specification No. 53** above, the Discharger shall establish a ground water monitoring system which includes:
- a. monitoring and response programs, including a sufficient number of background monitoring points installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that represents the quality of ground water that has not been affected by a release from the Landfill,

b. a detection monitoring program in accordance with Section 2550.8 of Chapter 15, including:

1. a sufficient number of monitoring points installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that represent the quality of ground water passing the point of compliance and to allow for the detection of a release from the waste management unit;
2. a sufficient number of monitoring points installed at additional locations and depths to yield ground water samples from the uppermost aquifer to provide the best assurance of the earliest possible detection of a release from the waste management unit.
3. a sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield ground water samples from portions of the zone of saturation, including other aquifers, not monitored pursuant to 54.b.1 and 54.b.2 above to provide the best assurance of the earliest possible detection of a release from the waste management unit;
4. a sufficient number of monitoring points and background monitoring points installed at appropriate locations and depths to yield ground water samples from zones of perched water to provide the best assurance of earliest possible detection of a release from the waste management unit; and
5. monitoring point locations and depths that include the zone(s) of highest hydraulic conductivity in each ground water body monitored pursuant to the above requirements.\*

**C. WATER QUALITY PROTECTION STANDARD (STANDARD).**

1. The Discharger shall propose for Executive Officer approval, Water Quality Protection Standard(s) (Standard) pursuant to Section 2550.2 of Article 5. The proposed Standard shall include proposal for the following five parts:

a. Constituents of Concern.

The list of Constituents of Concern for water bearing media (i.e., ground water, surface water, and soil pore liquid, and soil pore gas).

b. Concentration Limits for Detection Monitoring.

1) **DETECTION MONITORING:** For each Monitoring Point assigned to a Detection Monitoring Program, the Discharger shall propose for each Constituent of Concern one of the following for each medium (including ground water, surface water, and the unsaturated zone) monitored pursuant to Section 2550.7 of Article 5:

- a) a concentration limit not to exceed the background value of that constituent as determined pursuant to subsection 2550.7(e)(11)(A) of Article 5;
- b) that the waste discharge requirements include a statement that, at any given time, the concentration limit for that constituent will be equal to the background value of that constituent, as determined pursuant to subsection 2550.7(e)(11)(B) of Article 5; or
- c) a concentration limit greater than background established pursuant to subsection 2550.4 for corrective action program.

c. Monitoring Points and Background Monitoring Points for Detection Monitoring. For each waste management unit, the Discharger shall propose monitoring points at the points of compliance and additional monitoring points at locations determined pursuant to Section 2550.7 of Article 5 at which the Standard applies and at which monitoring shall be conducted.

d. Point of Compliance. The Point of Compliance is the edge of the Landfill's permitted area (Currently Permitted Landfill Boundary) shown on Attachment "B" and extends vertically downward through the uppermost aquifer.

e. Compliance Period. The Compliance Period is the number of years equal to the active life of the waste management unit (including any waste management unit activity prior to the adoption of the waste discharge requirements) plus the closure period. The Compliance Period is the minimum period of time during which the Discharger shall conduct a water quality monitoring program subsequent to a release. The estimated duration of the Compliance Period for the entire Landfill is 30 years (2046). The Landfill is expected to reach full capacity by the year 2016. Each time the Standard is broken (i.e., a release is discovered), the Landfill begins a Compliance Period on the date the Regional Board directs the Discharger to begin an Evaluation Monitoring program. If the Discharger's corrective action program (CAP) has not achieved compliance with the Standard by the scheduled end of the Compliance Period, the Compliance Period is extended until the Landfill has been in continuous compliance for at least three consecutive years.

2. Monitoring Parameters for Detection Monitoring.

a. The Discharger shall propose for Executive Officer approval, the **Detection Monitoring Parameters** for [ground water, surface water, perched zone, or soil-pore liquid]

samples; and volatile organic compounds<sub>water</sub> (VOC<sub>water</sub>), a composite parameter that encompasses a variety of constituents (VOC).

b. The Discharger shall propose for Executive Officer approval, the **Detection Monitoring Parameters** for soil pore gas samples; and volatile organic compounds<sub>soil pore gas</sub> (VOC<sub>gas</sub>), a composite parameter that encompasses a variety of gaseous-phase VOCs.

3. Additional Requirements:

a. The discharge shall not adversely impact the quality of water in any aquifer.

b. Discharge of waste shall not cause ground water in downgradient wells to exceed the State Department of Health Services latest recommended Drinking Water Action Levels or Maximum Contaminant Levels.

c. The discharge shall not cause a "statistically significant" adverse change in constituent concentrations in underlying ground waters, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area.

d. The discharge shall not cause concentrations of chemicals and radionuclides in underlying and downgradient ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations.

e. Upon Executive Officer approval of the proposed Standard, as required by Section C.1., above, the Regional Board shall establish a Standard for the Landfill. The Standard shall apply during the active life of the Landfill, the closure period, the post-closure maintenance period, and during any compliance period. The Standard shall be specified in an Executive Officer approved monitoring and reporting program for this Landfill.

- f. The concentrations of indicator parameters or waste constituents in water passing through the "Detection" Points of Compliance shall not exceed the "water quality protection standard(s)" established pursuant to the monitoring and reporting program.
- g. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board.
- h. Discharger shall determine the quality of all ground waters and surface waters along the perimeter of the Landfill, so that background levels can be established.

#### D. PROVISIONS

1. Order No. 86-69 "Waste Discharge Requirements for Monterey County Department of Public Works and Rural Garbage and Disposal Site, Monterey County," adopted by the Board on May 2, 1986, is hereby rescinded.
2. The Discharger shall comply with "Monitoring and Reporting Program No. 94-019", as specified by the Executive Officer.
3. The Discharger shall maintain a copy of this Order at the facility and make it available at all times to regulatory agency personnel and to facility operating personnel, who shall be familiar with its contents.
4. Discharger shall comply with all other applicable provisions of Chapter 15, Title 14, and Subtitle D that are not specifically referred to in this Order. If any applicable regulation requirements overlap or conflict in any manner, the most restrictive requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.
5. The Discharger shall maintain legible records of the volume and type of each waste discharged at each Module and the manner and location of discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Regional Board and of the State Water Resources Control Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.<sup>a</sup>
6. The Discharger shall be responsible for accurate waste characterization, including determinations of whether or not wastes will be compatible with containment features or other wastes and whether or not wastes are required to be managed as hazardous wastes.<sup>a</sup>
7. A list of the general types of the more widely used names of hazardous-type wastes prohibited at this site shall be posted on a legible roadway sign at the entrance in both English and Spanish. The sign shall also state the locations of the nearest hazardous waste disposal sites and shall list penalties for illegal dumping. A specific list of Hazardous Wastes and other types of materials prohibited at this Landfill shall be provided to commercial waste haulers that use this Landfill and shall be available to all other site users upon request.
8. The Regional Board considers the property owner and Discharger to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge.
9. The landowner and Discharger shall have a continuing responsibility to assure protection of usable waters, from discharged wastes and from gases and leachate generated by discharged waste, during the Landfill's active life, closure, and post-closure maintenance periods and during subsequent use of the property for other purposes.
10. Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for

compliance with this Order or with Monitoring and Reporting Program No. 94-019, as required by Sections 13750 through 13755 of the California Water Code.<sup>c</sup>

11. The Discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction or operation of the facility. This notification shall be given at least 90 days prior to the anticipated date of the change and shall be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with these Requirements. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator in writing of the existence of this Order. A copy of that notification shall be sent to the Board. Notification to the Board shall also comply with Section 2590(c) of Chapter 15.<sup>a</sup>
12. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of Section 13264 of the Water Code (discharge without waste discharge requirements). Transfer may be approved or disapproved in writing by the Executive Officer.<sup>c</sup>
13. Within 60 days after completing final closure of all landfill Modules,
  - a. the owner or operator must record a notation on the deed to the Landfill facility property, or some other instrument that is normally examined during title search, and notify the Executive Officer that the notation has been recorded and a copy has been placed in the operating record.
  - b. the notation on the deed must in perpetuity notify any potential purchaser of the property that:
    - 1) the land has been used as a landfill facility; and
    - 2) its use is restricted pursuant to Subtitle D, section 258.61(c)(3).
  - c. pursuant to Chapter 15, should the Discharger default in post-closure care, liability shifts to the new owner/operator.<sup>a,b,d</sup>
14. The Discharger shall submit to the Regional Board and the California Integrated Waste Management Board (Waste Board) for approval an updated closure and post-closure maintenance plan (Closure Plan) by July 30, 1994, describing the methods and controls to be used to assure protection of the quality of surface and ground waters of the area during partial and final closure operations and during any proposed subsequent use of the land. The Closure Plan must include:
  - a. a description of the final cover, designed in accordance with all applicable state and federal regulations and the methods and procedures to be used to install the cover;
  - b. an estimate of the largest area of the landfill Module ever requiring a final cover at any time during the active life;
  - c. an estimate of the maximum inventory of wastes ever on-site over the active life of the landfill facility;
  - d. a schedule for completing all activities necessary to satisfy all closure criteria as required by Chapter 15, Title 14, and Subtitle D regulations;
  - e. an estimate of closure and post closure maintenance costs;
  - f. a proposal for a trust fund or equivalent financial arrangement to provide sufficient funding for closure and post-closure maintenance; and

- g. the amount to be deposited in the trust fund or equivalent financial arrangement each year.

The Closure Plan shall be prepared by or under the supervision of a California registered civil engineer or certified engineering geologist, updated annually, and submitted to the Regional Board by the 30<sup>th</sup> day of July of each year. The method identified for each Modules' closure and to maintain protection of the quality of surface and ground waters shall comply with waste discharge requirements established by the Regional Board. Such waste discharge requirements must reflect the most current version of the Closure Plan. The Closure Plan report shall be consistent with all applicable state and federal regulations, including Chapter 15, Title 14, and Subtitle D.<sup>a,b,d</sup>

15. The Discharger shall notify the Regional Board of Modules to be closed at least 180 days prior to beginning any partial or final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved Closure Plan and that the plan provides for Module closure in compliance with all applicable state and federal regulations. If there is no approved Closure Plan, the Discharger must submit a complete Closure Plan at least 240 days prior to beginning any Landfill closure activities.<sup>a,b</sup>
16. The Executive Officer may require partial and/or final closure of any waste management unit regardless of whether such waste management unit has reached final capacity laterally and/or vertically for the protection of water quality.<sup>a</sup> Such a requirement will be requested in writing.
17. The Discharger shall report all changes in usage of daily cover and performance standards within 10 days following the change.
18. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate; ground water, leachate from the Modules, the vadose zone, and surface waters in

accordance with a Monitoring and Reporting Program specified by the Executive Officer throughout the post-closure maintenance period.<sup>a</sup>

19. The post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in all the Modules will not threaten water quality.<sup>a</sup>
20. Discharger shall immediately notify the Regional Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.
21. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Regional Board Executive Officer, proposing appropriate modifications to the Monitoring and Reporting Program. The request may address changes (a) to any statistical method, non-statistical method, or retest method used with a given constituent or parameter, (b) to the manner of determining the background value for a constituent or parameter, (c) to the method for displaying annual data plots, (d) to the laboratory analytical method used to test for a given constituent or parameter, (e) to the media being monitored (e.g., the addition of soil pore gas to the media being monitored), (f) to the number or placement of Monitoring Points or Background Monitoring Points for a given monitored medium, or (g) to any aspect of monitoring or QA/QC. After receiving and analyzing such a report, the Executive Officer either shall reject the proposal for reasons listed, or shall incorporate it, along with any necessary changes, into the attached Monitoring and Reporting Program. The Discharger shall implement any changes in the Monitoring and Reporting Program proposed by the Regional Board Executive Officer upon receipt of a revised Monitoring and Reporting Program.
22. The Discharger shall submit a complete liner system design report for Executive Officer consideration of any new waste management unit use and construction, at least 180 days prior

to waste management unit development. The design report shall adequately address any proposed deviation from the most currently approved fill sequencing plan. It must adequately address all applicable requirements of State (Chapter 15 and Title 14), and Federal (Subtitle D) landfill regulations.

23. Vertical expansions (i.e., additional refuse placement on top of existing **unlined** waste management units already containing refuse) above currently permitted final fill elevations, including anticipated settlement, as indicated in the most recently approved operations/master plan or Requirements, will not be permitted, **unless** the Discharger demonstrates the additional refuse placed on top of existing unlined waste management units does not significantly increase the threat to water quality. Such demonstrations shall adequately address all siting criteria and engineering properties of underlying refuse, differential settlement, the ability of the underlying waste to support the additional refuse, and all effects of the additional refuse upon the underlying refuse. The Discharger may submit and the Executive Officer may consider any proposal to satisfy the demonstration criterion. All conclusions shall consider site specific conditions, including subsurface hydrogeologic factors, existing threat to water quality, any existing State Water's degradation as a result of waste management units, waste discharges, beneficial uses of underlying and adjacent State Waters, size of the existing waste management unit, remaining capacity, existing and proposed final fill elevations, financial feasibility, and other relevant factors.
24. Pursuant to California Code of Regulations, Title 23, Chapter 15, Article 9, the Discharger must submit a technical report to the Executive Officer not later than August 11, 1998, which:
  - a. discusses whether there has been or will be changes in the continuity, character, location, or volume of the discharge;
  - b. discusses any proposed expansions (lateral and/or vertical expansions within and/or outside currently permitted landfill boundaries) or closure plans, including detailed information of the quality and quantity of waste discharged and the anticipated impact upon water quality and Landfill operations;
  - c. discusses whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision;
  - d. addresses all other applicable sections of Article 9, Chapter 15 (e.g., update of the Landfill's Development and Operations Plan, etc.); and
  - e. includes any other technical documents needed to demonstrate continued compliance with this Order and all pertinent state and federal requirements.<sup>a</sup>
25. Prior to September 30, 1994, the Discharger shall submit a technical report addressing compliance with all terms of this Order. The report shall include an implementation schedule for all work required by this Order.
26. Except for data determined to be confidential under Section 13267 (b) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the office of the Regional Board.<sup>f</sup>
27. All reports shall be signed as follows:
  - a. for a corporation; by a principal executive officer of at least the level of vice president;
  - b. for a partnership or sole proprietorship; by a general partner or the proprietor, respectively;

- c. for a public agency; by either a principal executive officer or ranking elected official; or,
  - d. their "duly authorized representative."
  - e. engineering reports; by a California Registered civil engineer or certified engineering geologist.
28. Any person signing a report makes the following certification, whether its expressed or implied:
- "I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fines and imprisonment."
29. The Discharger shall submit to the Executive Officer for review and approval a periodic load-checking program. The load checking program shall be adequately designed to ensure that "hazardous wastes", "radioactive wastes", and "designated wastes" are not discharged to the waste management unit. The load checking program shall be submitted by **December 1, 1994**. The program shall include, but not be limited to:
- a. number of random loads to be checked per month and/or year.
  - b. training program for on-site personnel.
  - c. record keeping and reporting program.
  - d. program implementation schedule.
  - e. alternatives for waste found to not be in compliance with these waste discharge requirements.
  - f. example of signs posted at the facility.
30. The Discharger shall submit an updated/revised version of its 1986 Master Plan. The Master Plan shall explain in detail all modifications/deviations from the existing Master Plan and shall be submitted by **December 1, 1994**. The Master Plan must include detailed information regarding regulatory considerations; design, construction and operating provisions; environmental monitoring; and closure and postclosure. Additionally, the Master Plan shall:
- a. include a Fill Sequencing Plan, including detailed maps. The Fill Sequencing Plan should describe in detail the overall development of the entire Landfill since waste was initially discharged at the Landfill's Module I to present discharge areas.
  - b. include a detailed description of the lateral and vertical extent of refuse within all existing Modules (i.e., Modules I through first half of III). It must include an accurate estimate of waste volumes within each existing Landfill module and an approximation of the remaining volume and years of capacity for each existing module and all new proposed modules within currently permitted Landfill boundaries. It must also describe all existing available space within currently permitted Landfill areas (i.e., modules where refuse has been placed in the past, but have not reached final permitted elevation and modules or portions of modules where refuse has never been placed).


- c. discuss any plans/proposals to close or partially close any modules or portions of modules, any proposed liner systems and respective design components, any proposed plans for long-term intermediate cover for Landfill areas which may remain inactive for long periods of time.
31. The Discharger shall develop a long-term intermediate cover design for all Landfill areas which have not reached final elevation, but will remain inactive for over one year. Cover designs shall minimize percolation from precipitation and surface water flows. The proposed design shall be submitted by **December 1, 1994**, for Executive Officer approval. Executive Officer approval of the design will be based on site specific factors as described in **Discharge Specification B.42**.
32. The Discharger shall submit a 'Wet Weather Preparedness Report' by **November 1, of each year**. The report must address, in detail, compliance with all wet weather preparedness related specifications (e.g., **Discharge Specifications B.20., B.21, B.22, B.28, B.29, and B.30**) of this Order, and all other relevant Chapter 15, Title 14, and Subtitle D criteria.
33. If the Discharger or the Regional Board determines, pursuant to Section 2550.8(g) or (i), that there is evidence of a release from any Landfill waste management unit, including subsequent releases, the Discharger shall immediately implement the procedures outlined in Article 5 of Chapter 15.
34. The Discharger shall re-evaluate the current corrective action financial assurance cost estimate (\$1,343,045), once sufficient data is collected from the site hydrogeologic investigation, and a ground water monitoring system is developed and implemented. The revised financial assurance amount shall be appropriated to a restricted reserve in a Financial Assurance Instrument (Instrument) to cover the estimated Article 5 and Subtitle D costs to initiate and complete corrective action of either: (1) the "worse case" reasonably foreseeable release, as required by Chapter 15 regulations; or (2) a "known" release, as required by both Chapter 15 and Subtitle D regulations. The total estimated amount must, at a minimum, cover corrective action program costs; evaluation monitoring program costs; and annual testing, operation, and maintenance costs. The Discharger shall submit a report every five years that either validates the Instrument's ongoing viability or proposes and substantiates any needed changes. The Instrument is subject to Executive Officer approval.
- REPORT DUE DATES:** The revised corrective action cost estimate must be submitted for Executive Officer approval by **January 30, 1995**. The report validating the Instruments viability is due every five years thereafter."
35. By **January 30, 1995**, the Discharger shall submit a signed original Financial Assurance Instrument for corrective actions as outlined in **Provision D.34**, above for Executive Officer review and approval.

43. The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this order:

### REPORT AND IMPLEMENTATION DATE SUMMARY

<u>TASK</u>	<u>IMPLEMENTATION DATE</u>
Runoff diversion and erosion prevention [Specification No. 20]	October 1, of each year
Minimum one foot cover over entire active WMU [Specification No. 29]	October 1, of each year
Vegetation placement over entire Landfill area [Specification No. 30]	October 1, of each year
<u>"REPORT"</u>	<u>"DUE DATE"</u>
Site Assessment Report [Provision No. 40]	April 22, 1994
Closure Plan Update [Provision No. 14]	July 30, 1994 July 30, of each year, thereafter
Proposed WQPS (Standard) Report [Provision No. 42]	August 9, 1994
Proposed Ground Water Monitoring System [Provision No. 41]	August 9, 1994
Technical Compliance Report [Provision No. 25]	September 30, 1994
Liquid Mass Balance [Specification No. 31]	October 30, 1994
Wet Weather Preparedness Report [Provision No. 32]	November 1, of each year
Load Checking Program [Provision No. 29]	December 1, 1994
Proposed Long-term Intermediate cover design report [Provision No. 31]	December 1, 1994
Updated/Revised Master Plan [Provision No. 30]	December 1, 1994
Written Technical Report [Provision No. 24]	August 11, 1998

I, **WILLIAM R. LEONARD**, Executive Officer, do hereby certify the foregoing is full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 11, 1994.

  
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Executive Officer

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